**3GPP TSG-RAN4 Meeting #97-e *R4-2017153***

**Electronic Meeting, 2 – 13 November, 2020**

|  |
| --- |
| *CR-Form-v12.0* |
| **CHANGE REQUEST** |
|  |
|  | **38.133** | **CR** | draft | **rev** | **-** | **Current version:** | **16.5.0** |  |
|  |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
|  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network |  |

|  |
| --- |
|  |
| ***Title:***  | draftCR to introduce accuracy requirements for RSTD measurement |
|  |  |
| ***Source to WG:*** | Huawei, HiSilicon |
| ***Source to TSG:*** | R4 |
|  |  |
| ***Work item code:*** | NR\_pos-Perf |  | ***Date:*** | 2020-09-21 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***Release:*** | Rel-16 |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)Rel-12 (Release 12)**Rel-13 (Release 13)Rel-14 (Release 14)Rel-15 (Release 15)Rel-16 (Release 16)* |
|  |  |
| ***Reason for change:*** |  There is no accuracy requirements for RSTD measurement. |
|  |  |
| ***Summary of change:*** |  Introduce accuracy requirements for RSTD measurement  |
|  |  |
| ***Consequences if not approved:*** |  Performance requirements for RSTD measurement are missing. |
|  |  |
| ***Clauses affected:*** | 10.1.23.2 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **x** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **x** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **x** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

<Start of Change 1>

#### 10.1.23.2 Measurement Accuracy Requirements

The RSTD measurement reported by the UE shall fulfil the accuracy requirements defined in Table 10.1.23.2-1 for FR1, provided that the following conditions are met.

- Conditions defined in clause 7.3 of TS 38.101-1 [18] for reference sensitivity are fulfilled.

- Conditions for RSTD measurements are fulfilled according to Annex B.2.z for a corresponding Band for each relevant PRS resource configured for measurement.

- The uncertainty in receive time difference between the reference resource and the neighbouring resources is no larger than *nr-DL-PRS-ExpectedRSTD-Uncertainty-r16*

The RSTD measurement reported by the UE shall fulfil the accuracy requirements defined in Table 10.1.23.2-2 for FR2, provided that the following conditions are met.

- Conditions defined in clause 7.3 of TS 38.101-2 [19] for reference sensitivity are fulfilled.

- Conditions for RSTD measurements are fulfilled according to Annex B.2.z for a corresponding Band for each relevant PRS resource configured for measurement.

- The uncertainty in receive time difference between the reference resource and the neighbouring resources is no larger than *nr-DL-PRS-ExpectedRSTD-Uncertainty-r16*

Table 10.1.23.2-1: RSTD absolute accuracy in FR1

TBA

Table 10.1.23.2-2: RSTD absolute accuracy in FR2

TBA

<End of Change 1>